ATS-032 CON/REISSUE PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Reissue Application of	)	
	)	
SATOSHI KONO ET AL.	)	
	)	
U.S. PATENT NO. 5,465,635	)	Group Art Unit: 3502
	)	
Serial No. 08/243,526	)	
	)	Examiner: V. Luong
Filed: May 16, 1994	)	
	)	
Issued: November 14, 1995	)	
	)	
For: CRANKSHAFT ASSEMBLY FOR INTERNAL COMBUSTION ENGINE	)	

REISSUE DECLARATION AND POWER OF ATTORNEY

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

As a below-named inventor, we respectively hereby declare that:

1. We have reviewed and understand the contents of the attached specification, including the claims.

2. We believe that we are the original, first, and joint inventors of the subject matter described and claimed in U.S. Letters Patent No. 5,465,635 ("the '635 patent") granted on November 14, 1995, and in the attached specification and claims for which invention we solicit a reissue patent.

3. We do not know and do not believe that the invention was ever known or used in the United States before our invention thereof.

4. We acknowledge the duty to disclose information that is material to the examination of this application in accordance with Section 1.56(a) of Title 37, Code of Federal Regulations.

5. We hereby claim foreign priority benefits under Title 35, U.S.C. § 119 of Japanese Patent Application Nos. 1-48816 and 1-48817, both filed February 28, 1989, as well as priority benefits under Title 35, U.S.C. § 120 of U.S. Patent Application Serial No. 07/485,659, filed February 27, 1990.

6. We have identified and listed below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: None.

7. We believe the original patent to be partly or wholly inoperative because of error, without deceptive intention, by reason of our claiming less than we had a right to claim in

the patent.

8. The errors which render the patent wholly or partly inoperative or invalid arose from inadvertence, accident or mistake, and without any fraudulent or deceptive intention on our part, as explained in detail below.

9. By this reissue, we seek correction of the errors in the original claims due to the excess (arising due to some unnecessary claim limitations, as detailed below) and the insufficiency (arising due to the failure to include some features of the disclosed invention, as detailed below) in the claims of the original issued patent. Due to these listed errors in the claims, the claims fail to adequately protect the invention disclosed in the specification, thereby rendering the original patent at least partly inoperative.

10. Specifically, the original claims of the patent are at least partly inoperative because none of the claims are broad enough to encompass the device shown in the attached Fig. A. The attached Fig. A shows a flywheel assembly in which the reinforcing member 34 has no outward flange (i.e., no first portion), unlike the reinforcing members 4 shown in Figs. 1 and 3

of the '635 patent. The flywheel assembly shown in the attached Fig. A is a new preferred embodiment of the Assignee.

11. The Assignee, Unisia Jecs Corporation of Japan (by name change from the assignee of record, Atsugi Unisia Corporation), is a large developer and manufacturer of automotive parts, including flywheel assemblies. The Assignee has an "inventors' department" made up of engineers, skilled craftsmen, and other individuals, including the inventors of the present application, which conceive and develop new products and designs for the Assignee.

12. The Assignee has a "patent & licensing department" made up of individuals other than those individuals that make up the "inventors' department." The patent & licensing department is responsible for reviewing new products and methods developed by the inventors' department for possible patenting and licensing, and also for making license arrangements with third parties. The patent & licensing department is also responsible for corresponding with and instructing outside patent representatives in matters relating to the Assignee's pending patent applications, including the scope of claims and prior art, based in part upon information received from the inventors'

department.

13. The inventors' department of the Assignee, became aware of the flywheel assembly structure shown in the attached Fig. A after the parent U.S. Application Serial No. 07/485,659 had been filed with the U.S. Patent and Trademark Office on February 27, 1990. More specifically, the inventors' department of the Assignee became aware of the flywheel assembly structure shown in the attached Fig. A sometime between the filing date of February 27, 1990 and January 26, 1993, but the inventors' department is unable to specify exactly when.

14. On January 26, 1993, the applicants' Japanese patent representatives, ISP Corporation, received a letter from the applicants' U.S. patent counsel, Marks & Murase L.L.P., dated January 16, 1993, enclosing an Examiner's Answer mailed on January 13, 1993. The deadline for the appellant's reply brief was February 13, 1993.

15. On January 29, 1993, the applicants' Japanese patent representatives sent a report on the Examiner's Answer to the patent & licensing department of the Assignee by facsimile. In this report of January 29, 1993, the applicants' Japanese

patent representatives first proposed additional claim limitations that were eventually added to claim 11 (claim 1 of the '635 patent) in an amendment filed February 15, 1994. Specifically, the newly proposed claim limitations included the limitation "wherein each of said elastic plate, said flywheel body and said reinforcing member comprises a first portion, said first portion of said flywheel body being placed axially between said first portions of said elastic plate and said reinforcing member, and said first portion of said flywheel body being axially movable between said first portions of said elastic plate and said reinforcing member." This proposed limitation is the origin of the similar limitations contained in each of Claims 1, 8 and 9 of the issued '635 patent. At this point, the applicants' Japanese patent representatives were completely unaware of the flywheel structure shown in Fig. A, and the applicants' Japanese patent representatives' proposal was only intended to cover all of the illustrated embodiments disclosed in the '635 patent.

16. On February 4, 1993, the Assignee's patent & licensing department sent, by facsimile to the applicants' Japanese patent representatives, a written approval to the applicants' Japanese patent representatives's proposal of January

29, 1993, together with a copy of Japanese Utility Model Provisional Publications Nos. 1-67352 and 63-190639. At this point, the Assignee's patent & licensing department was still unaware of the flywheel structure of Fig. A. The Assignee's file has no evidence that the patent & licensing department sent the inventors' department the report of January 29, 1993 with the proposed new claim limitations or asked for an opinion of the inventors' department regarding the same. Upon information and belief, the applicants' Japanese patent representatives's report of January 29, 1993 was not sent to the inventors' department, and the written approval of the new claim limitations was prepared and sent by the patent & licensing department without consulting the inventors' department.

17. On February 5, 1993, the applicants' Japanese patent representatives sent by facsimile a further proposal to the Assignee's patent & licensing department. This further proposal contained the proposed amendment to claim 11, as well as newly proposed claims 19 to 26 for inclusion in a potential continuation application. The applicants' Japanese patent representatives sent a facsimile letter on March 26, 1993 to the applicants' U.S. patent counsel and requested the applicants' U.S. patent counsel to await a decision on the pending appeal

before pursuing a continuation application.

18. A decision on appeal for the '526 application by the U.S. Patent Office Board of Appeals and Interferences was mailed January 5, 1994. On January 24, 1994, the applicants' Japanese patent representatives received a facsimile letter dated January 23, 1994 from the applicants' U.S. patent counsel regarding the Board's decision. On January 25, 1994, the applicants' Japanese patent representatives sent a report on the decision to the Assignee by facsimile, and proposed to file the claims that were previously proposed by the applicants' Japanese patent representatives on February 5, 1993.

19. On January 28, 1994, the Assignee sent a facsimile letter to the applicants' Japanese patent representatives approving the filing of the proposed claims. The Assignee's file has no evidence that the patent & licensing department transferred the applicants' Japanese patent representatives's report of January 25, 1994 regarding the Board's decision to the inventors' department, nor that the patent & licensing department asked for opinion of the inventors' department regarding the same. Upon information and belief, the applicants' Japanese patent representatives's report of January 25, 1994 was not sent

or otherwise brought to the attention of the inventors' department.

20. On February 3, 1994, the applicants' Japanese patent representatives sent the applicants' Japanese patent representatives's proposed amendments to claim 11 and new claims 19 to 26 to the applicants' U.S. patent counsel. On February 15, 1994, the applicants' U.S. patent counsel filed an Amendment and an Information Disclosure Statement, and sent a facsimile to the applicants' Japanese patent representatives confirming the filing of the same. On March 3, 1994, the applicants' Japanese patent representatives reported the applicants' U.S. patent counsels' facsimile of February 15, 1994 to the Assignee.

21. On May 16, 1994, the applicants' U.S. patent counsel filed a file wrapper continuation application (Serial No. 08/243,526). On December 27, 1994, an initial Office Action on the merits in the '526 continuation application was mailed to applicants' U.S. patent counsel. On January 17, 1995, the applicants' Japanese patent representatives received a letter dated January 5, 1995 from the applicants' U.S. patent counsel regarding the Office Action of December 27, 1994.

22. On January 23, 1995, the applicants' Japanese patent representatives sent a report to the Assignee regarding the Office Action of December 27, 1994. This report contained the applicants' Japanese patent representatives' proposed amendment to the claims, which amendments were eventually made by an amendment filed March 27, 1995. The Assignee's patent & licensing department sent the applicants' Japanese patent representatives' report of January 23, 1995 to the inventors' department, and the first named inventor, Mr. Satoshi Kono, checked the proposed amendment. However, Mr. Kono inadvertently thought that there continued to exist a broader main claim 1, and that the proposed claim 11 was a narrower claim. Mr. Kono approved the proposed amendment based on this misunderstanding with no deceptive intent. On February 7, 1995, the Assignee sent a written approval of the proposed amendments to applicants' Japanese patent representatives. On February 14, 1995, the applicants' Japanese patent representatives sent a proposed amendment to the applicants' U.S. patent counsel, which amendment was filed by applicants' U.S. patent counsel on March 27, 1995.

23. The patent & licensing department of the Assignee first became aware of the flywheel structure shown in the attached Fig. A at a meeting with the inventors' department held

on August 31, 1995. At this meeting, the Assignee's patent & licensing department and the inventors' department all became aware of the insufficiencies in the allowed claims in the '526 application.

24. The Assignee sent a facsimile communication to applicants' Japanese patent representatives on September 7, 1995 requesting that the claims of the '526 application be broadened to cover the structure shown in the attached Fig. A. The applicants' Japanese patent representatives received a copy of the attached Fig. A on September 12, 1995.

25. Due to administrative oversight, the applicants' Japanese patent representatives did not bring the insufficiencies in the allowed claims to the attention of the applicants' U.S. patent counsel until December 5, 1995, approximately three weeks after issuance of the '635 patent. At that time, a decision was made to seek reissue of the '635 patent to correct the insufficiencies in the claims, as explained in detail below.

26. The claims of the '635 patent are insufficient in that each of the independent claims 1, 8, and 9 contain excess limitations that prevent the claims from encompassing the

flywheel structure shown in the attached Fig. A. Specifically, the following phrase, as recited in each of claims 1 and 8, contains limitations that are not necessary to the patentability of the applicants' invention, and results in the applicants claiming less than they had a right to claim:

> wherein each of said elastic plate, said flywheel body and said reinforcing member comprises a first portion, said first portion of said flywheel body being placed axially between said first portions of said elastic plate and said reinforcing member, and said first portions of said elastic plate, said flywheel body and said reinforcing member defining clearances for allowing said first portion of said flywheel body to move axially between sid first portions of said elastic plate and said reinforcing member.

More specifically, the above limitation is excessive because it fails to encompass a flywheel assembly, such as the assembly shown in the attached Fig. A, where the reinforcing member 34 does not have an outward flange (i.e., no claimed "first portion").

27. Applicants propose to remedy the above-mentioned errors in the issued claims by adding new independent claims 13 and 14, which correspond to issued claims 1 and 8, respectively. New claims 13 and 14 each recite the phrase:

> wherein said elastic plate is clamped between said reinforcing member and a shaft end of said crankshaft, said flywheel body comprises a central hole, and said reinforcing member is received concentrically

> in said central hole, whereby said flywheel body is movable axially relative to said reinforcing member during operation

in place of the phrase quoted above containing the excess limitations. In contrast to issued claims 1 and 8, new independent claims 13 and 14 are broad enough to read directly on the flywheel assembly shown in the attached Fig. A, while still distinguishing over the prior art.

28. Claim 9 of the '635 patent also contains excess limitations that prevent the claim from encompassing the flywheel structure shown in the attached Fig. A. Specifically, the following two phrases, as recited in claim 9, contain limitations that are not necessary to the patentability of the applicants' invention, and result in the applicants claiming less than they had a right to claim:

> (1)
> and an outward flange (4b) extending radially outwardly from said second end of said cylindrical portion, (col. 9, lines 32-34)
>
> * * *
>
> (2)
> and located axially between said inner portion of said elastic member and said outward flange of said reinforcing member, said outward flange is axially spaced from said inner portion of said elastic member at

> an axial distance which allows axial movement of said inner portion of said flywheel body between said inner portion of said elastic member and said outward flange of said reinforcing member (col. 10, lines 8-15).

More specifically, the above claim limitations are excessive because they fail to encompass a flywheel assembly, such as the assembly shown in the attached Fig. A, where the reinforcing member 34 does not have an "outward flange."

29. Applicants propose to remedy the above-mentioned errors in the issued claims by adding new independent claim 15, which corresponds to issued claim 9, but does not contain the excessive limitations. Specifically, new claim 15 defines the applicants' invention without using phrase (1) recited in the preceding paragraph, and with the following phrase substituted for phrase (2):

> and said reinforcing member allows axial movement of said inner portion of said flywheel body relative to said inner portions of said elastic member and said reinforcing member

In contrast to issued claim 9, new independent claim 15 is broad enough to read directly on the flywheel assembly shown in the attached Fig. A, while still distinguishing over the prior art.

30. Further to the above-described errors caused by the excessive limitations in the issued claims of the '635 patent, we found that the issued claims were at least partly inoperative because the claims did not encompass the following combination of features:

> A flywheel assembly for a power transmission system for transmitting engine torque to a driven unit, comprising:
> a crankshaft;
> an elastic plate comprising an inner portion secured to a shaft end of said crankshaft;
> a flywheel body secured to said elastic plate and having an engageable surface for engaging with a clutch disc; and
> a reinforcing member for reinforcing said elastic plate at said inner portion of said elastic plate;
> wherein said elastic plate has an axial rigidity in the range of 600 kg/mm to 2200 kg/mm so as to ensure transmission of engine torque to said driven unit, while decreasing noise produced by a bending vibration of said crankshaft; and
> wherein said elastic plate is clamped between said reinforcing member and said shaft end of said crankshaft.

31. To overcome this deficiency, new independent claim 16 is added. New claim 16 shares some similarities with original claim 1, but is broad enough to read on the flywheel assembly shown in the attached Fig. A, as well as the embodiments disclosed in the '635 patent.

32. Further to the above-described errors caused by the excessive limitations in the issued claims of the '635 patent, we found that the issued claims were at least partly inoperative because the claims did not encompass the following combination of features:

> A flywheel assembly for a power transmission system for transmitting engine torque to a driven unit, comprising:
> a crankshaft;
> an elastic plate comprising an inner portion secured to a shaft end of said crankshaft;
> a flywheel body secured to said elastic plate and having an engageable surface for engaging with a clutch disc; and
> a reinforcing member for reinforcing said elastic plate at said inner portion of said elastic plate;
> wherein said engageable surface has an axial run-out which is no more than 0.1 mm; and
> wherein said elastic plate is clamped between said reinforcing member and said shaft end of said crankshaft.

33. To overcome this deficiency, new independent claim 31 is added. New claim 31 shares some similarities with original claim 8, but is broad enough to read on the flywheel assembly shown in the attached Fig. A, as well as the embodiments disclosed in the '635 patent.

34. In addition to the above described errors caused

by the excessive limitations in the issued independent claims 1, 8, and 9 of the '635 patent, the issued claims are also insufficient due to a failure to claim several features of the disclosed invention. Specifically, the claims fail to recite several of the structural features of the disclosed reinforcing member, as well as the interrelationship of the flywheel body, the elastic plate, and the reinforcing member, which are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent.

35. Applicants propose to remedy the errors mentioned in the previous paragraph by adding new claims 17 to 30, which depend from new independent claim 16, and by adding new claims 32 to 42, which depend from new independent claim 31. These new dependent claims 17 to 30 and 32 to 42 set forth several additional features of the applicants' invention that further define the claimed subject matter. The limitations found in the new dependent claims are discussed below in detail.

36. New claims 17 and 32, which depend from claims 16 and 31, respectively, recite additional features of the applicants' invention as follows:

> wherein said flywheel body comprises an inner portion defining a circular central

> hole, and an outer portion surrounding said inner portion of said flywheel body; said elastic plate comprises an outer portion which surrounds said inner portion of said elastic plate and which is fixed to said outer portion of said flywheel body; said reinforcing member is fit in said central hole of said flywheel body with a clearance to form a loose fit; and said reinforcing member comprises a smooth outer circumferential surface for allowing said inner portion of said flywheel body to move axially to said elastic plate without limiting an axial movement of the inner portion of said flywheel body toward said elastic plate.

The additional structural features recited in new claims 17 and 32 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 17 and 32 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

37. New claims 18 and 33, which depend from claims 17 and 32, respectively, recite additional features of the applicants' invention as follows:

> wherein said reinforcing member extends axially from a first member end defined by a radially extending abutment surface held in contact with said elastic plate, to a second member end; said smooth outer circumferential surface of said reinforcing member extends smoothly from said abutment surface toward said second member end of said reinforcing member; said smooth outer circumferential

> surface of said reinforcing member comprises an outer cylindrical surface section fit in said central hole of said flywheel body, and an outer smooth curved surface section which extends continuously and smoothly from said outer cylindrical surface section to said abutment surface; and said smooth curved surface section is a surface of revolution whose diameter decreases smoothly from a diameter of said cylindrical surface section toward said abutment surface.

The additional structural features recited in new claims 18 and 33 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 18 and 33 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

38. New claims 19 and 34, which depend from claims 18 and 33, respectively, recite additional features of the applicants' invention as follows:

> wherein said flywheel body comprises a side surface facing toward said elastic plate, and said engageable surface which faces away from said elastic plate and which extends in an imaginary flat surface; and said second member end of said reinforcing member is located axially between said engageable surface and said side surface of said flywheel body and away from said imaginary flat surface.

The additional structural features recited in new claims 19 and 34 are common to both the flywheel assembly shown

in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 19 and 34 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

39. New claims 20 and 35, which depend from claims 16 and 31, respectively, recite additional features of the applicants' invention as follows:

> wherein said flywheel body comprises an inner portion defining a circular central hole, and an outer portion surrounding said inner portion of said flywheel body; said elastic plate comprises an outer portion which surrounds said inner portion of said elastic plate and which is fixed to said outer portion of said flywheel body; and said reinforcing member comprises a smooth outer circumferential surface allowing said inner portion of said flywheel body to move axially toward said elastic plate without limiting an axial movement of the inner portion of said flywheel body toward said elastic plate.

The additional structural features recited in new claims 20 and 35 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 20 and 35 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

40. New claims 21 and 36, which depend from claims 17

and 31, respectively, recite additional features of the applicants' invention as follows:

> wherein said flywheel body comprises a side surface facing toward said elastic plate, and said engageable surface which faces away from said elastic plate; and said reinforcing member comprises a radially extending abutment surface held in contact with said elastic plate, and a smooth outer circumferential curved surface which extends continuously and smoothly from said abutment surface to a curved surface end which is located axially between said side surface of said flywheel body and said engageable surface of said flywheel body.

The additional structural features recited in new claims 21 and 36 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 21 and 36 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

41. New claims 22 and 37, which depend from claims 21 and 36, respectively, recite additional features of the applicants' invention as follows:

> wherein said smooth outer circumferential curved surface of said reinforcing member is a surface of revolution whose diameter increases smoothly from said abutment surface of said reinforcing member to said curved surface end of said smooth outer circumferential curved surface.

The additional structural features recited in new claims 22 and 37 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 22 and 37 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

42. New claims 23 and 38, which depend from claims 21 and 36, respectively, recite additional features of the applicants' invention as follows:

> wherein said reinforcing member extends axially from a first member end defined by said abutment surface to a second member end which is located axially between said engageable surface and said side surface of said flywheel body; and an axial distance of said second member end of said reinforcing member from said abutment surface of said reinforcing member is smaller than an axial distance of said engagement surface of said flywheel body from said abutment surface of said reinforcing member.

The additional structural features recited in new claims 23 and 38 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 23 and 38 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

43. New claims 24 and 39, which depend from claims 21 and 36, respectively, recite additional features of the applicants' invention as follows:

> wherein said engageable surface of said flywheel body extends in an imaginary flat surface; and said reinforcing member extends axially from a first member end defined by said abutment surface to a second member end which is located axially between said engageable surface and said side surface of said flywheel body and which is away from said imaginary flat surface.

The additional structural features recited in new claims 24 and 39 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 24 and 39 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

44. New claims 25 and 40, which depend from claims 24 and 39, respectively, recite additional features of the applicants' invention as follows:

> wherein said flywheel body comprises an inner portion defining a circular central hole, and an outer portion surrounding said inner portion of said flywheel body; said elastic plate comprises an outer portion which surrounds said inner portion of said elastic plate and which is fixed to said outer portion of said flywheel body; said reinforcing member comprises a received portion which is received in said central

> hole of said flywheel body; and said outer smooth curved surface of said reinforcing member extends smoothly and continuously from said abutment surface to said received portion.

The additional structural features recited in new claims 25 and 40 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 25 and 40 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

45. New claims 26 and 41, which depend from claims 25 and 40, respectively, recite additional features of the applicants' invention as follows:

> wherein said received portion of said reinforcing member comprises a cylindrical outside surface received in said central hole of said flywheel body, and the diameter of said smooth curved surface increases smoothly and continuously from said abutment surface to a diameter of said cylindrical surface of said reinforcing member.

The additional structural features recited in new claims 26 and 41 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 26 and 41 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

46. New claim 27, which depends from claim 24, recites a narrower range of axial rigidity (i.e., 600 kg/mm to 1700 kg/mm), as compared to the range recited in independent claim 16 (i.e., 600 kg/mm to 2200 kg/mm). Claim 2 of the '635 patent also recites the narrower range of axial rigidity. However, new claim 27 is broad enough to read on both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent, while claim 2 of the '635 patent does not read on the flywheel assembly shown in the attached Fig. A due to the excess limitations in independent claim 1. New claim 27 is thus presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

47. New claim 28, which depends from claim 24, recites that an axial run-out of the engageable surface of the flywheel body when rotated by said crankshaft is no more than 0.1 mm. Claim 3 of the '635 patent also recites this axial run-out feature. However, new claim 28 is broad enough to read on both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent, while claim 3 of the '635 patent does not read on the flywheel assembly shown in the attached Fig. A due to the excess limitations in independent claim 1.

48. New claims 29 and 42, which depend from claims 28 and 39, respectively, recite additional features of the applicants' invention in product-by-process format as follows:

> wherein said engageable surface of said flywheel body is formed so as to make the axial run-out no more than 0.1 mm by processing said engageable surface of said flywheel body in an assembled state in which said crankshaft, said elastic plate, said flywheel body and said reinforcing member are assembled in a unit.

The additional features recited in new claims 29 and 42 are common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claims 29 and 42 are presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

49. New claim 30, which depends from claim 24, recites additional features of the applicants' invention as follows:

> wherein said side surface of said flywheel body comprises an outer side surface section which faces toward said elastic plate and which is fastened to an outer portion of said elastic plate and an inner side surface section which faces toward said elastic plate, which is surrounded by said outer side surface section of said flywheel body, and which is raised from said outer side surface section axially toward said elastic plate.

The additional features recited in new claim 30 are

common to both the flywheel assembly shown in the attached Fig. A and the embodiments disclosed in the '635 patent. New claim 30 is presented to further define the claimed subject matter to which the applicants are entitled, as disclosed in the '635 patent.

50. It is believed that the foregoing distinctly specifies the excess and insufficiency in the claims as required by 37 C.F.R. § 1.175(a)(3). These excesses and insufficiencies in the claims are the errors that the applicants seek to correct by this reissue.

51. The subject matter of new claims 13 to 42 is believed to be adequately supported by the specification and drawings contained in the '635 patent. Thus, no new matter is added by these claims.

52. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the

United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

53. We hereby appoint the following attorneys to prosecute this application and transact all business in the U.S. Patent and Trademark Office connected therewith: Ronald P. Kananen, Registration No. 24,104, Richard Linn, Registration No. 25,144, Dale Curtis Hogue, Sr., Registration No. 32,832, George T. Marcou, Registration No. 33,014, Michael D. Bednarek, Registration No. 32,329, George C. Beck, Registration No. 38,072, Jeffrey L. Thompson, Registration No. 37,025, and Richard T. Peterson, Registration No. 35,320.

54. We hereby direct that all correspondence and telephone calls concerning this application be directed to:

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Wherefore, we hereby subscribe our names to the foregoing specification and claims, declaration, and power of attorney.

Date: March 26, 1996 By: Satoshi Kono
Satoshi Kono

Date: March 26, 1996 By: Shizuaki Hidaka
Shizuaki Hidaka

Date: March 26, 1996 By: Tetsu Takahashi
Tetsu Takahashi

FIG. A